

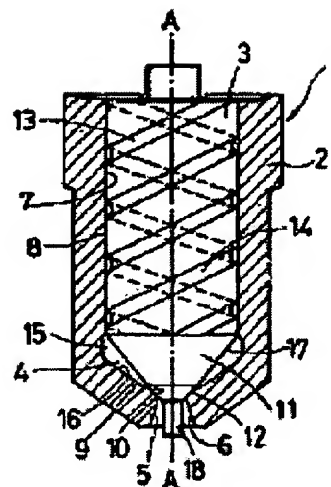
## FUEL INJECTION NOZZLE

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### Abstract of JP10141183

**PROBLEM TO BE SOLVED:** To provide a fuel injection nozzle capable of providing a sufficient rotational flow in a fuel stay, making uniform a mixture between fuel and air and preventing the occurrence of soot. **SOLUTION:** Fuel supplied through spiral passages 13 and 14 formed between the wall surface 7 of the hollow hole 4 of a nozzle main body 2 and the sliding surface 8 of a needle valve 3 becomes a rotational flow in a fuel stay 15. Since the fuel stay 15 is a tapered annular chamber, the rotational flow is suddenly accelerated toward a single injection hole 5. Since the single injection hole 5 has a tapered surface 6 fan-shaped toward an injecting direction, the action of the fan-shaped nozzle forms a flow widened in a radial direction. The fuel has a large tangential direction speed when injected from the single injection hole 5 and dispersed more uniformly in a combustion chamber to become mist.



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